Atty. Dkt. No. 023174-0140

# JC17 Rec'd PCT/PTO 20 SEP 2005

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

### **CLAIMS**

1. (Original) A process for producing a polymerelectrolyte membrane comprising the steps of:

coating a solution of a polymerelectrolyte on at least one surface of a porous substrate; and

laminating the coated porous substrate and a supporting material while applying a tension F (kg/cm) in a range of the following expression (A)

$$0.01 \le F \le 10$$
 (A)

to the coated porous substrate.

- 2. (Original) The producing process according to Claim 1, wherein the supporting material is laminated on a coated surface of the coated porous substrate.
- 3. (Currently Amended) The producing process according to Claim 1 or 2, wherein a surface of the supporting material to be laminated on the porous substrate is previously coated with the solution of a polymerelectrolyte.

- 4. (Original) The continuously producing process according to Claim 1, wherein a viscosity  $\eta$  (cps) of the solution of a polymerelectrolyte is in a range of  $5 \le \eta \le 5000$ .
- 5. (Original) The producing process according to Claim 1, wherein a concentration C (wt %) of the solution of a polymerelectrolyte is  $1 \le C \le 50$ .
- 6. (Original) A polymerelectrolyte membrane obtained by the process according to Claim 1.
- 7. (Original) A fuel cell comprising the polymerelectrolyte membrane according to Claim 6.
- 8. (Original) An apparatus for producing a polymerelectrolyte membrane comprising:
- a first coating means for coating a solution of a polymerelectrolyte on a porous substrate which is conveyed,
- a tension applying means for applying a tension F (kg/cm) in a range satisfying the expression (A)

#### $0.01 \le F \le 10$ (A)

to the porous substrate coated with the solution of a polymerelectrolyte; and a laminating means for laminating the porous substrate which is coated with the solution of a polymerelectrolyte and applied the tension, and a supporting material.

- 9. (Original) The producing apparatus according to Claim 8, wherein in the first coating means, coating the solution of a polymerelectrlyte on a surface of the porous substrate on which the supporting material is to be laminated.
- 10. (Original) The producing apparatus according to Claim 8, further comprising a means of drying a laminate.
- 11. (Original) The producing apparatus according to Claim 10, comprising a second coating means for further coating the solution of a polymerelectrolyte on the porous substrate in the laminate dried by the drying means.
- 12. (Original) The producing apparatus according to Claim 10, comprising a second coating means of further coating the solution of a polymerelectrolyte on the porous substrate in the laminate before being dried by the drying means.